Training of Dais

DIRECTORATE GENERAL OF HEALTH SERVICES
MINISTRY OF HEALTH, GOVERNMENT OF INDIA
NEW DELHI

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TRAINING OF DAIS

Suggestions for organising and conducting training of dais and for the supervision of their practice

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Second Edition

DIRECTORATE GENERAL OF HEALTH SERVICES
MINISTRY OF HEALTH, GOVERNMENT OF INDIA
NEW DELHI

First Edition — 2000 copies—1960
Second Edition — 5000 copies—1964

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PREFACE

This small pamphlet "Suggestions for organising and conducting training of dais and for supervision of their practice" would be useful in implementing the Central Government Scheme for the training of dais. It would, at the same time, ensure a uniformity in the standard of training dais in different States.

It is hoped that the State Governments will adhere to the details in undertaking the scheme as outlined in this pamphlet. Copies of the pamphlet should be supplied to the persons conducting the training. If necessary, the pamphlet may be translated into regional languages so that the midwives can easily follow the instructions contained in it.

INTRODUCTION

Approximately 85 per cent of the births in India are attended by unskilled women who are rendering midwifery services as a hereditary profession and are known in most areas as dais. There are about 30,000 midwives in India who have undergone professional training and most of them are employed in hospitals or are engaged in midwifery services in large towns. The problem of rural areas as regards midwifery services, therefore, continues to remain unsolved. As a result nearly 13 million births are attended by unqualified women who do not have knowledge of asepsis or possess simple equipment necessary to cut the cord. Although under the Government's Five Year Plan, provision is being made for appointing four midwives to serve the population of an area covered by a primary health centre, it will not be possible for the midwives to personally conduct the estimated births (approximately 3,000 a year). The staff can, however, serve a more useful purpose to begin with in the training and later by supervising the work of the dais and assisting in their practice. Each midwife will be assisting 10 to 12 dais from a Sub-centre and thus improve the midwifery services in about 25 villages covered by a Sub-centre or four midwives assisting approximately 60 dais in a primary health centre.

The Government of India, therefore, feel that as an interim measure better use can be made of the dais (women in hereditary profession) by improving their standard of practice. In recommending such a scheme the Government of India is aware of its drawbacks and would recommend to the States that along with the schemes for training of dais certain provisions be made to ensure a proper standard of their practice on completion of their training, and the scheme for training of professional midwives be expanded.

It is suggested that in undertaking the schemes for training of dais certain points should receive consideration. (1) Only such numbers as are needed during the interim period be trained while a sufficient number of professional midwives are being trained to provide a good standard of midwifery. (2) As the dais have been working on their own for several years, a short training would only make a temporary impression on their usual methods. Therefore provision should be made for continued assistance and supervision of their work. (3) To ensure that a large number of women do not enter the profession and that only such number that is needed is trained, the names of dais who have had their training and are practising in an area should

be put on a register and the register renewed each year. The dais on completion of the training should receive some recognition for the training they have undergone so that the public would learn to recognise a trained dai and would co-operate in eliminating the untrained dais. (4) In areas where sufficient number of trained dais or midwives exist, necessary legislation should be introduced so that midwifery practice is restricted to dais who are trained or to midwives who have undergone a recognised course of training and the untrained women are eliminated from the midwifery profession.

TRAINING PROGRAMME

The training course for dais has to be extensive so that in a certain limited period all women attending child birth are trained and their practice is improved. At the same time it is necessary to ensure that the number required to fulfil the needs of a particular area is trained so that additional untrained women do not continuously enter the profession. It is reckoned that a provision of one dai for every 50 births would be adequate in an area.

Objectives of Training

(a) To improve midwifery services in the rural areas by utilising the existing personnel.

(b) To introduce some knowledge of cleanliness and asepsis into the work of the dai so that her practice is improved and the incidence of (puerperal) sepsis is reduced.

(c) To wean the dai from crude and unhygienic methods of work and use of unscientific equipment.

(d) To train the dai to recognise conditions where she must obtain assistance from qualified staff.

(e) To help the dai to be an agent between the Maternity and Child Welfare Services or hospital services of the areas and the families she is serving.

Selection of Candidates

In order to recruit the dais in an area, a survey be made of the area by systematically visiting all the births that have occurred in the previous six months and contacting the dais who attended on them. It will thus be possible to know the dais practising in the area. In the first instance the more popular ones and those in practice for a year or more should be induced to enrol for the training. The number sufficient for the area (calculated at the rate of one dai for every 50 births) should be enrolled for training. The number of dais required to be trained in a primary health centre will be approximately 60. These can be trained in four or five groups depending on the extent of the area from which they are drawn. The area served by a Sub-centre may provide a sufficient number of dais for a class. The training of groups of 10 to 12 dais may be located at a Sub-centre and should radiate from the Sub-centre where the midwife is already stationed.

Content of Training

For this type of personnel it is necessary that the instructors and teachers take the training to the trainees instead of depending on them to come for instruction. The staff will, therefore, have to reside in the area where the training is conducted and offer constant assistance to the dais. The instructions will have to be of a very elementary and simple nature and adapted according to the intelligence and level of understanding of the dais under training and the methods practised by them. The instruction should be of a practical nature which would be useful to the dais in improving their technique. The procedures and details of work would need to be properly demonstrated.

Since a dai is already practising in the area where the training is conducted and is attending to births even during the period of training, every attempt should be made by the personnel conducting the training to be present when the dai is actually attending to a case of confinement or when she is giving pre-natal and post-natal care. She should be assisted in an appropriate manner so that she is not offended. In this connection, it must be recognised that the dai is a permanent resident of the area and enjoys the confidence of the families with whom she is working. Every care should, therefore, be taken that her prestige and the confidence of the family in her skill are not adversely affected. During the training, the importance of ante-natal care and recognition of abnormal conditions should be impressed on her so that she understands the scope of her work and its limitations. She also learns to seek assistance in dealing with certain conditions and learns to make appropriate arrangements in case a mother requires the help of the doctor or needs to be referred to a hospital. The other points which require emphasis are asepsis and adherence to certain rules of personal cleanliness and aseptic methods. The dai should also learn to use proper equipment at a confinement and get herself thoroughly familiar with its use and care during the period of her training.

Syllabus for Training

The training course for dais will be in accordance with the syllabus prescribed by the Indian Nursing Council. (A copy of the Syllabus is given in Appendix I). It is suggested that there should be one or two theoretical classes a week and at least two practical demonstrations a week in addition to the field training in the homes and at actual deliveries.

The details of training are embodied in this pamphlet and will serve as useful teaching aids to Health Visitors and Midwives. These teaching aids have been in use in some of the

pilot training centres and have been found extremely helpful in putting the instructions in a simple but impressive way to the indigenous dais under training and should prove useful to teachers in the training of dais.

Length of Training

The training would need to be spread over a period of six months so that the dais are in touch with the instructors for a longer period and get imbued with the principles of cleanliness and measures for asepsis, etc. It must be recognised that the formal training of dais under the scheme is the beginning of a long-term programme of continued technical assistance and guidance to the dais in midwifery practice, as detailed under "Supervision of Dais".

Unit of Training

A Training Unit should be a composite area, either a National Extension Service Block or a Thana or Tehsil, with a population of approximately 60,000 to 70,000. It is estimated that approximately 60 dais will be required for such an area so that one trained dai is available for every 1,000 to 1,500 population or one trained dai for every 50 births. The unit may be divided into four areas for purposes of training, each area roughly corresponding to a Sub-centre of the primary health centre and covering 25 villages.

A. Organisation of Training in Area

(*i*) *Size of class and the area to be covered*

The main objective of the training is to offer the dai assistance and take the training to her instead of expecting her to avail of the teaching. Hence it is suggested that an area which is a comprehensive one, consisting of a primary health centre, a Thana or Taluk and comprising approximately 60,000 to 70,000 population, having approximately 3,000 births per annum and having 60 to 70 dais in practice be defined as a unit for purposes of training. The area defined should as far as possible, be an administrative unit so that the trained dais can be registered, or necessary legislation should be introduced to control their practice when there is a sufficient number of trained dais in a particular area. For convenience, the entire area so defined for training should be divided into four or five sectors each with a population of 12,000 to 15,000 or with approximately 400 to 500 births or an area corresponding to the Sub-centre of the primary health centre where 10 to 12 dais are in practice. It is likely that it may not always be possible to adhere strictly to the size of the class and it may have to vary from 10 to 15

dais according to the extent of the area from which the dais are drawn. If the villages are scattered, a dai from each of the large villages should be recruited for training.

(*ii*) *Dais to be Trained*

It is estimated that a woman practising midwifery in a rural area should be attending to 40 to 50 births per annum along with her other household duties. The area selected would therefore have approximately 60 to 80 dais who would need to be trained under the scheme if adequate provision is to be made for skilled attendance at all the births in a particular area. The number of dais trained should also not be more than the number required as some of the less popular ones would get very few cases and will not be able to maintain sufficient practice. If, however, the number of dais is less than the ratio of one dai o 50 births some of the dais would be doing more than they can manage and consequently the efficiency of their work would suffer.

(*iii*) *Recognition of Training and Award of Efficiency Discs on Completion of Training*

On completion of the prescribed six months' training, it is suggested that the entire group be given short oral examination and recognised as trained dais. The trained dais should be recognised as qualified to attend to all normal cases of confinement and should receive a certificate to that effect. A list of dais, with the number of the certificate awarded to each dai and the place of her practice, should be maintained in the Maternity and Child Welfare Section of the State Directorate of Health Services. In order that the public appreciate the value of a trained dai and learn to recognise the trained dai, a small metal disc bearing her name and the number of her certificate should also be awarded to the dai when she is registered. She could either wear the disc round her neck or have it with her, when she attends a case, as a token in recognition of her having undergone the required training. Such a recognition would raise her status. Her registration as a trained dai would discourage the untrained dais from practising midwifery.

With a view to ascertaining from time to time only trained dais are practising in an area and to facilitate supervision of their practice, local registers would need to be maintained. It is suggested the local registers should be maintained by health visitor or in the primary health centre. The midwives at the Sub-centres should maintain lists of dais practising under their supervision in the areas served by a Sub-centre. The registers at State and District level and at the primary health centre should be kept up-to-date and renewed from time to time preferably each year. (The Headings for the dais' registers are given in Appendix II).

B. Staff for Training

A health visitor or an experienced midwife with nursing background is considered to be the proper person for imparting the training. Health visitors receive special instruction in training of dais and in the supervision of their practice. They also have practical experience in imparting training to dais during the period of their training. The health visitors are therefore competent to teach the dais. Since supervision of practising dais by a competent staff and continued assistance to them are essential for improving the standard of midwifery service, it is necessary that the supervisory staff assist with the training so that the same staff can take over supervisory functions when the training is completed.

In view of the shortage of health visitors and of midwives with nursing background it is suggested that the health visitors assigned to each primary health centre or Unit should be responsible for the training of dais in the area covered by a primary health centre and they should be assisted by the midwife of the Sub-centre in the training of every group of 10 to 12 dais. The midwives will thus be associated with the training in a primary health unit and will later take over supervisory duties. Each midwife will supervise the practice of 10 to 12 dais working in the area covered by the Sub-centre. In the case of a primary health centre, maternity and child welfare centres or community development block, the health visitors and the midwives serving in the Unit from the main centre and the Sub-centres will be responsible for the training of dais as well as for supervision of their practice on completion of the training. In all other areas special staff consisting of a health visitor and four midwives will need to be provided for each Unit of training.

The Nursing Council has prescribed that during the six-month training period, a dai should conduct 20 deliveries of which at least 10 should be under the supervision of the teaching staff. In order to enable the States to expand the training programme over a large area in a short period, it is suggested that one health visitor may be assigned more than one class at a time. In other words, a health visitor can conduct training for two groups of dais at the same time provided the areas selected for training are adjacent to each other and the dais are not too widely distributed. The health visitor should be assisted by a midwife who should reside in the area of training at each class. Thus a health visitor with the assistance of four midwives would be able to train 40 to 60 dais in four or five groups in one year. If the recommendations of the Nursing Council that each dai should conduct 20 cases is accepted by the States, each dai will be required to conduct 10 cases during the first three months when she is undergoing intensive theoretical and practical training. She will conduct the rest of the deliveries during the second three months of the training under the guidance of the midwife.

C. Equipment

(*i*) *Teaching Equipment for Dais*

The equipment for theoretical classes and demonstration is as under :

1. Obstetrical Manikin & Foetal Doll.
2. Model of new-born baby—20".
3. Model of female reproductory organs.
4. Birth atlas.
5. Dai's kits.
6. Bowl.
7. Nail brushes.
8. Nail files.

The above list forms part of the equipment of the primary health centre and would be useful for giving theoretical training and for demonstrating and explaining to the dais what a uterus looks like, how it grows and how the child lies in normal and abnormal positions, and the occurrence of other abnormal conditions and their recognition.

(*ii*) *Dai's Kits*

Each dai under training should be supplied a kit which has simple, but essential, equipment for use at a delivery to maintain a reasonable standard of service and to ensure proper aseptic conditions. These kits should be supplied to her on her enrolment to the training and its use should be demonstrated to her at practical classes. She should be required to use the kit during attendance at confinement and should learn its use and care during the period of her training.

*Contents of the Kit**

Metal carrying box.
Scissors—blunt point.
Bottle, screw top, narrow mouth for dettol.
Bottle, screw top, wide mouth for cord ligature.
Bottle, screw top, narrow mouth for boric powder.
Bottle, screw top, narrow mouth for baby's eye lotion.
Dissecting forceps.
Soap container.
Nail brush.
Hand towels—2.

*A kit can be had from the Indian Red Cross Society, 1, Red Cross Road New Delhi-1.

Irrigation can 24 oz. capacity with irrigation rubber tubing and stop cork.

(The irrigation can with its fittings has been provided primarily to enable the dai to wash her hands and to provide her with clean water for other purposes when she has no one to help her).

Water bowls—two sizes with lids.

(The large water bowl has a lid which can serve as a tray to lay down the articles and the bowl can be used for sterilising in case other facilities for sterilisation are not available).

The bowl be used for keeping sterile swabs for use during the delivery.

Kidney tray.

Rubber sheeting—2 pieces.

Small bowl with lid.

D. Encouragement to Dais for Undergoing Training

In the initial stages, it will not be easy to persuade the dais to come for training and it may be necessary to provide small rewards for attendance for practical and theoretical training. In order to compensate her for the loss of practice and to encourage her to take advantage of the training, provision has been made for reward.

The value of the rewards is estimated at Rs. 180 for the six months' training in the plains. The rewards to the dais may be arranged as under :—

For attending 20 classes @ Rs. 1·50 per class.	Rs. 30 (20 classes)
For conducting 20 deliveries @ Rs. 1·50 per delivery . . .	Rs. 30 (20 cases)
For conducting 5 deliveries in the presence of health visitor @ Rs. 3 each.	Rs. 15 (5 cases)
For 40 post-natal visits @ 75 nP. per visit	Rs. 30 (40 visits) presuming that the dai will conduct more than 25 cases.
For ante-natal cases brought for examination:—	
For 40 new cases @ 75 nP. each . .	Rs. 30 (40 new cases)
For 120 repeat visits @ 37 nP. each . .	Rs. 45 (120 revisits of 40 ante-natals).
Total . .	Rs. 180.

Provision of Pre-natal Services

In order to ensure that the dai, during training, learns to look after expectant women and to make sure beforehand that a particular case she has booked for delivery is a normal case of confinement, it will be necessary to organise pre-natal services where the dais (under training, as well as after completion of their training) can bring the mothers for pre-natal examination and obtain assistance of the health visitor or midwife in selecting only normal cases of confinement. Even the trained dais would have limited skill in the profession. They can however be expected to maintain a reasonable standard of efficiency provided they attend to normal cases which have been selected by a midwife or health visitor at a pre-natal clinic.

It is not always possible in rural areas to arrange transportation of difficult and abnormal cases after they are in labour. Provision of pre-natal clinics where dais can take their cases for examination would not only help to detect abnormal conditions during pregnancy, but would also enble the families to make appropriate arrangements for mothers equiring skilled care to be removed to a hospital in good time. It is, therefore, necessary that the dais attend to normal cases only and provision is made through established pre-natal clinics to detect abnormality during pregnancy so that the dais learn to be agents between the families and the clinics and bring mothers (under their care) for legular examination.

In view of the limited staff of the primary health centre and shortage of doctors in rural areas it may be difficult to provide a high standard of pre-natal care. It is suggested that the health visitor and midwife should establish clinics at convenient places in the area of training or under a Sub-centre. The midwife should continue these clinics even after the training of dais is completed so that the dais and the mothers could readily avail of the facilities. The health visitor should regularly visit the pre-natal clinics once or twice a week and assist the midwife at these clinics. The doctors of the primary health centre should pay at least fortnightly visits to each pre-natal clinic.

Supervision of Dais and Supply of Refills

To ensure that the dais trained under this scheme maintain a high standard of practice and receive continued assistance from a qualified person, it is suggested that the midwife, preferably the one who assisted the health visitor with the training, be located in the area where a class has just completed the training. Although the midwife has supervisory duties, she would need to assist the dais in such a manner as to gain their confidence and guide them to maintain a proper standard of practice. The supervision and assistance should be in the form of a continued process of teaching so that the standard of practice of the dais is steadily improved.

It is felt that one midwife can supervise the work of 10 to 12 trained dais and organise pre-natal services in the area. In order to provide effective supervision, the midwife should reside in the area of her work. To facilitate work, she should divide the area assigned to her into convenient sub-areas, each with three or four dais. She should allocate definite days to each area and contact the dais of the area when she is visiting the area of a particular village. Her work in each area would include :—

(*a*) Visits to pre-natal and post-natal cases under care of dais;

(*b*) Ante-natal examination at a Centre;

(*c*) Inspection of the dais' equipment;

(*d*) Observation of the work of dais in the homes.

In addition to the above, the midwife should hold group meetings of all dais once or twice a month and obtain reports of cases conducted by them. At these meetings she should give them a short class and provide any refills for the bag that may have been used by the dai during the month.

Refills, *e.g.*, boric powder, cotton for cord ligature, antiseptics, dettol, soap or any articles that are worn out and need replacement, would be supplied to the dais from time to time. There should be some organised system to replenish the equipment. This will ensure a steady supply of the articles or refills to dais, and at the same time would enable the midwife and the health visitor to maintain close contact with the dais in practice.

It is suggested that a stock for necessary refills be maintained at the main centre of the Primary Health Centre or the Maternity and Child Welfare Centre or the dispensary. The health visitor should supply the articles to the midwives of the sub-centres for allocation to the dais practising in their area. The quantity of each article to be supplied to a dai will depend on the extent of her practice and the deliveries she had attended. The following would serve as a guide in judging the requirements for refills of dai's bags in respect of different items.

Drugs and Articles for Refills of Dai's Kits

1. Dettol (in 2 oz. amber coloured bottle—narrow mouth).

2. "Cord Powder" (mixture of boric acid, zinc sulphate, starch equal parts) or Tincture Iodine $\frac{1}{2}$ oz. in amber bottle.

3. Cotton for cord ligatures (soft ball of thread No. 40) or crochet cotton one string or ball. The

cord ligature is prepared by taking a thread 21″ long and folding it in three strands, after twisting, knots to be tied at each end of the twisted thread.

4. Cotton for swabs (eye swabs) and other swabs or pad.

5. Gauze pieces for cord dressing and soft sterile cotton mouth pieces for clearing air passages.

6. Pottasium permanganate crystals.

7. Nail brush.

8. Soap for washing and toilet.

9. Silver Acetate solution in amber glass bottle ½ oz. and dropper or Sulphacetamide ointment tube.

Basis for Ascertaining the Quantity Required for Refills

½ oz. dettol for every delivery.

½ drachm pottasium permanganate crystals for use in post-natal care for every ten deliveries.

½ oz. cord powder for every birth and/or ½ oz. Tincture Iodine (in a dark bottle).

One ball of cotton for ten deliveries (30 cord ligatures).

4 oz. absorbent cotton for each delivery.

One yard of 6″ wide gauze for every birth.

One nail brush every three months.

Two pieces of soap for every delivery.

Half an ounce of silver acetate or one tube of Sulphacetamide ointment for every ten births.

Two small towels 12″ × 20″ once a year or for every 50 deliveries.

One plastic sheeting once a year or for every 50 deliveries.

Irrigator tubing 4 feet once a year or for every 50 deliveries.

Bottle replacement to be provided annually calculated 10 for every 100 in use.

The midwife should also maintain a local register for the dais in the area assigned to her. She should record all the cases delivered by a particular dai and her observation on her (dai's) work. If she finds that a particular dai is repeating certain unhygienic practice, she should draw the attention of the dai and try to wean her from that practice. If necessary the midwife should give closer supervision.

Since supervision of dais is a continual process, it is necessary that the midwife has proper residence and place to hold pre-natal clinic.

LECTURES AND DEMONSTRATIONS

Preliminary

The training should be spread over a period of six months. The dai must conduct 20 cases under the supervision of the midwife or the health visitor. The trained staff must be present at least at five deliveries and see that appropriate equipment is used at the time.

The dais must be taught the importance of cleanliness and shown when and how to wash their hands.

They should learn to test urine and the significance of albumin in the urine.

They must attend at least 20 pre-natal clinics and must be taught abdominal palpation. They must personally examine 20 pregnant women under supervision. They must learn how to give care to normal case of pregnancy and advise on diet, hygiene and preparation for confinement. They must know when to send for medical aid for certain untoward signs and symptoms during pregnancy, labour or during the lying-in period of the mother and for the new-born.

They must be taught how to give care to the new-born infant including simple resuscitation.

They must be instructed on infant feeding and management of breast feeding. The dai should be encouraged to refer sick infants and young children to the nearest doctor or the doctor of the primary health centre.

They must be taught the use of the dai's kit, and the method of sterilizing the equipment and taking care of the kit and its contents.

In the initial stages of training, the dai may be loaned the bag for use. When she has delivered five cases and has learnt its use it may be given to her permanently.

The dai should be taken to the nearest taluq health unit or the health centre in a Community Project or National Extension Block or to the nearest hospital, to enable her to

see the facilities available for dealing with abnormal casee, and the type of help she can obtain. It would also help her to get over the fear of hospitals and enlist her willing co-operation to remove a case to the hospital readily.

LECTURES FOR INDIGENOUS DAIS

The syllabus as prescribed by the Indian Nursing Council can be covered in 18 to 20 lectures and demonstration classes of 2 hours each. The theoretical teaching and demonstration should be further emphasised in the practical teaching at clinics and when the dai is attending to a mother in the home.

LECTURES I & II

ANTE-NATAL CARE

The dai must be told what is pregnancy and the importance of pre-natal care. She must be told that if she sees the mother at regular intervals she can help her (mother) to keep well. In case there is anything wrong with the mother during the ante-natal period, the dai may be able to detect the same and get the doctor's help early enough. Make sure that the dai understands that she must try and get the mother to a hospital without delay so that the defect is attended to and difficult labour and its risks are avoided.

What can the Dai Discover by Ante-natal Examination ?

(1) *Urine testing** : If the urine has albumin in it, the dai will suspect kidney trouble. She will look at the mother's feet for swelling. She will find out whether the mother has headaches, vomiting, spots before the eyes, pain in the stomach, etc. If the mother has any or all of these symptoms, the dai would know that the mother may get fits and must be sent to the hospital.

(2) *General Observance* : By looking at the mother the dai can say if she is very short or is deformed or has a bad limp. The dai must insist that the mother is examined at a clinic or by a doctor to make sure that the birth passage is normal, and that the baby will be able to be born normally. The dai should not conduct the first delivery of a mother at home if she can see that the bones are not quite normal, or if the mother is very young or unusually small in stature. Also, if a woman has delivered dead babies previously, the

*Dais will only be expected to test urine under supervision in the ante-natal clinic.

dai should get her treated, as the mother may have some disease in her blood which causes the death of babies in the womb or soon after birth. The mother can be given necessary treatment during pregnancy so that the babies are born healthy. The dai should, therefore, have her properly treated at the clinic or by a doctor.

The dai can teil if the mother's blood is poor in quality (anaemic). The woman will look pale and tired, and her eyes, lips, tongue and nails will look paler than those of the healthy people. She may complain of dyspepsia diarrhoea, giddiness, etc. Many women are anæmic, but if a pregnant women is anaemic, her baby also is pale and small. If the mother bleeds even a little at the time of delivery, it may be enough to make her very ill. She may even die as a result of shock and heart failure and the baby may be born before it is full-term. The dai should make sure that mothers who are anaemic are under the continued care of a clinic or doctor, so that they can be given medicine and advice on proper diet, to make their blood richer.

Some mothers may look unwell as a result of poor diet. Others may have some illness, namely, tuberculosis, syphilis, chronic malaria, diarrhoea, etc. The dai must make sure that sick mothers are seen at a clinic or by the doctor for treatment and to decide if they can be delivered at home.

WHAT ADVICE SHOULD THE DAI GIVE TO THE EXPECTANT MOTHER ?

Personal Cleanliness : The dai should explain to the mother the need to bathe every day, to wear clean clothes and to keep her hair clean and tidy.

Diet : The dai should give advice on diet so that the mother eats plenty of green leafy vegetables, home milled rice and other cereals, and realises the importance of milk, if non-vegetarian, she should be advised to eat an egg every day provided she can afford it, and to take some meat or fish and fruit every day.

Fluids : The mother must drink much more fluids than usual, at least three seers of fresh cool water so that the kidneys, which are having extra work to do, are flushed out freely.

Rest : She must try and persuade the mother to rest with her feet up for two hours during the day.

Precautions : The mother should not lift heavy weights when she is pregnant. If she is feeding a baby at the breast, she should start weaning him, as it is too much for her to carry one baby and feed another at the same time.

Bowels : The mother should have a motion every day. If she suffers from constipation, she must take extra fluids, green vegetables and fruit. She should never take castor oil.

Fresh air : This is important, especially for women in *purdah*. The dai should advise them to do as much of their work as possible in the courtyard outside their house.

When to Send for Immediate Medical Help in the Antenatal Period or When to Take the Mother to Hospital ?

1. Signs of albumin in urine, headache, swelling, spots before the eyes, epigastric pain—in fact, all symptoms leading up to eclampsia.
2. Malpresentations after the 36th week of pregnancy.
3. History of dead babies before, or abortions and miscarriages.
4. Bleeding during pregnancy. (May be threatened or inevitable abortion, or placenta praevia).
5. Deformed bones, or very short, or very small or very young, or elderly women having their first baby.
6. Very anaemic mothers suffering from severe anaemia and malnutrition.
7. During sickness, even if the sickness has nothing to do with pregnancy.
8. Mothers having heavy vaginal discharge. (May have some disease which can lead to blindness in the baby).
9. If the abdomen is very large. (The mother may have too much water, and she will be inclined to bleed a lot after delivery, or she may have more than one baby).
10. Any other condition that makes the dai think that the mother may not have a normal delivery.

Demonstrate : 1. Examination of peregnant woman, recognition of anæmia, small pelvis, examination of urine, significance of albumin, if present.

2. Palpation of the uterus—demonstrate position of baby in the uterus with dummy foetus and pelvis.

URINE TESTING

The dai should be taught how to test the urine for albumin.

Procedure

Fill a test tube 3/4 full with urine. Test the reaction with litmus paper. Dip the edge of blue litmus paper into the urine. If it turns pink, the reaction is acid, and the urine can be tested. If the litmus paper does not change colour, dip pink litmus paper into the urine. If it turns blue, it shows the urine is alkaline. We cannot test the urine, unless it is acid, so we must turn the urine acid by adding a drop of acetic acid. When the urine is acid, we boil the top inch over a spirit lamp. If the urine remains clear, we know that there is no albumin. If, when boiled, a cloud appears, we add a few drops of acetic acid. If the cloud remains after we have boiled the urine and added the acetic acid, then we know there is albumin, and we must show the urine to the doctor or health visitor.

Why Do We Test the Urine ?

We test the urine to see if there is albumin in it. If there is we know that the kidneys of the mother are having too much work to do, and so they cannot do it properly and as a result poison is accumulating in her system.

There are other signs that indicate that kidneys are failing :

1. Oedema
2. Headaches
3. Vomiting
4. Epigastric pain, and if we do not help the mother she will get spots in front of her eyes, and later fits.

The doctor will know if the mother's blood pressure is increasing and the condition is getting worse. The mother must attend the health centre regularly to ensure that the urine is free from albumin and the blood pressure is normal. If the mother refuses to attend, the dai could always collect the urine and have it examined, and she could report the case to the health visitor who could then visit the mother. When the health visitor visits a mother in the early stage of the condition she will advise the mother to stay in bed and to omit eggs, meat and salt from her diet.

If the blood pressure is high, the health visitor will suspect that the mother may have fits, and will warn the relations and advise them that the mother be removed to a hospital. The mother will be kept quiet and given medicine to make her sleep

If she does not improve, it may be necessary to induce the deliver even if the baby is not full-term, as it may be the only way to save the life of the mother. Remember that sometimes a mother who seems alright may have fits after the baby is born, if that should happen, the mother must be removed to a hospital even after delivery.

Encourage the dais to test the urine of all mothers at regular intervals, but to always suspect something is wrong if a mother, at the same time, has oedema or any of the other warning symptoms.

The dais should be able to repeat the list of danger signs, *i.e.*, albumin in urine, oedema, headaches, epigastric pain, vomiting, eye changes—all leading to fits

Blood pressure will only be checked at the clinic by the doctor or the health visitor or midwife.

Demonstration after Lecture II

ABDOMINAL PALPATION

The dai must be taught how to palpate. She should be instructed to first observe the abdomen to see if the shape is normal. Then, she should be taught the height of the fundus of the uterus at different weeks of pregnancy, and should be able to tell when the mother will deliver (within a fortnight).

Next, she must find out the presentation, so that she knows what part of the baby will come into the pelvis first. She must find out the position, (whether the baby's back is to the left or to the right). She must find out the lie (whether the baby's spine is in the same direction as the mother's or whether the baby is transverse, *i.e.*, lying across the pelvis). She musr also know the degree of engagement of the presenting part.

Procedure

The dai should have her hands warm. She should stand on the right side of the mother. She should be shown to place her hand first on the top of the fundus of the uterus, and ascertain the number of weeks of pregnancy and whether it corresponds to the date of last menstruation of the

mother. Then she should be shown to palpate with one hand on either side of the abdomen, to feel for the back and the limbs. She should be shown how to steady the uterus with one hand while she palpates with the other. Next, she should be shown how to feel for the presenting part with both hands towards the pelvis. She should be shown how to recognise the head from its hardness and roundness. If the head is not in the pelvis, she will be able to move it easily from side to side. When she has recognised the head, she will be able to tell whether the head can go into the pelvis or still at the pelvis. She may be able to feel most of the head and yet not be able to move it, thus she will know the head is "fixed" or has gone into the pelvis. If the head is deeply engaged in the pelvis, the dai will not be able to feel the head at all. The dai should be taught that in the case of a first baby the head should engage before the mother starts labour.

If the dai finds that the head is presenting, it means that the position is normal, but if she finds that the head is in the fundus and the breech in the pelvis, it means the baby will be born breech first. A dai should always advise a mother with first baby to go to a hospital if it is breech presentation and for any other delivery, if the previous baby had died at birth.

The dai must not deliver a mother at home if the baby is in a transverse position (lying across the abdomen), as the shoulder will go into the pelvis first, and the baby will not be delivered easily.

If the abdomen of the mother is too big, and the baby floats freely, it may mean the mother has too much fluid, and often the mother may bleed excessively after the delivery. The dai should avoid attending to such cases at home. It would be better to advise the mother to have the delivery in a hospital.

If a woman's abdomen is too big it might mean the woman will have more than one baby in the uterus. Twins can be delivered at home if everything is satisfactory, but if the dai suspects more than one baby it is preferable to send the mother to a hospital.

The dai must listen to the foetal heart sound, and make sure that the baby is alive. She will not hear the heart sound until the baby is 20-24 weeks, but the mother should feel the baby move at 18 weeks. Some primiparas do not feel the baby move till later than that.

If a mother's abdomen does not increase in size and the foetal heart sound cannot be heard, the mother should have proper examination at a clinic.

LECTURE III

NEEDS OF THE MOTHER AND THE BABY DURING PREGNANCY

Diet During Pregnancy and Lactation

1. *Food for Everyone*

To make the babies strong and healthy, women must eat good helpings of several kinds of food every day.

This is the way to eat better food with very little extra cost —

(a) Let rice or chapatis constitute only half of principal meals with plenty of pink skin left on the rice or unpolished rice. Wheat, ragi, jowar or bajra may be eaten in place of rice or may supplement rice.

(b) Use cooking fat, or take nuts oil.

(c) Take vegetables, the green leafy ones are best. Amaranth (Mulaikeerai), Fenugreek (Menthulu), gram leaves, drumsticks ; other good vegetables are those which are red or yellow inside like pumpkin, marrow, carrot, tomato. If possible try to grow some vegetables yourself in your garden.

(d) Fresh fruit when it is in season and cheap, should be taken after it is carefully washed.

(e) Take fresh milk. Goats are cheap to keep and their milk is equally good. Skimmed milk powder can be bought, it is cheap and nourishing. It can be used to drink or for cooking or for making curds.

(f) Take sprouted gram one or two spoons a day.

2. *Food for Pregnant and Nursing Mothers*

For nine months of pregnancy and at least nine months after the baby is born, a mother needs food for her own requirements and for the baby :—

(*a*) Foods to make the baby grow . .	*e.g.*, milk, meat, fish, eggs, green leafy vegetables, dal.
(*b*) Food for blood supply . . .	*e.g.*, liver, meat, egg, pulses, green leafy vegetagles, banana.
(*c*) Food for general good health. .	Fresh fruit and vegetables. Shark liver oil, vitamin capsules.

3. *A Suitable Daily Diet for Pregnant and Nursing Woman*

Unpolished rice	9 ozs.
Atta, or ragi or jowar	5 ozs.
Meat , or fish or pulse	3 ozs. (the gram sprouted).
Green leafy vegetables	6 ozs. (some washed well and eaten raw).
Non-leafy vegetables	8 ozs. (including some root vegetables).
Butter or pure ghee	1 oz., with cooking oil—1 or 2 ozs.
Jaggery	2 ozs.
Fresh fruit or dried fruit	2 ozs.
Milk	½ to 1 seer is recommended.
Egg	One a day, as often as possible.

Sunlight and fresh air, exercise, daily bath, daily bowel action, good rest and plenty of water, will help the body to make the best use of these foods.

Note : When teaching this lesson, the dai should know the foods available and their prices in her particular village.

Demonstrate : Good diet, vegetable garden, preparing milk from powder. Malnutrition in mothers and results of poor diet on the mother and the new-born.

LECTURE IV

PREPARATION FOR HOME DELIVERY

The dai must visit the mother during the pregnancy period so that she can get to know her, see that she is fit to be delivered at home. The dai should choose a clean bright room or part of a room for the delivery. If the mother has one room, the dai must see that the room is cleaned and things that are not required are tidily put away.

The mother should keep ready for the delivery the following :—

Plenty of clean old cotton clothes (to make pads of, to wrap the baby in, to use as napkins, etc.) Clothes for the baby, if possible.

A clean set of clothes for the mother after delivery.

One or two towels, if possible.

Clean sheeting for under the mother.

One large dekchi for boiling water, and one for swabs and boweis. (Remember that the mother can use the dekchi afterwards, and that she does not need to buy a new one if she already has one in use.)

One large surai for boiled and cooled water.

One old pot with lid for putting dirty pads and swabs in.

One pot to use as an improvised bedpan.

Something to bathe the baby in.

Soap, Til or Gingily oil, castor oil and if the mother can afford, some cotton wool and dettol.

All these things except the pots, should be kept in a metal box. If the mother has not got a trunk, then use a large closely woven basket or a pot and keep it covered all the time. The dai should make sure that the old cotton clothes have been boiled, washed well and dried in the sun. The dai must help the mother to make the pads and she must be sure that her hands are clean before she touches them. The dai must know that she must handle the pads only at the ends and not in the middle.

The dai must tell the mother to put some water on to boil as soon as she starts pains or has signs of the onset of labour. She must always know where she can find the dai, and the dai must go to the house as soon as she is sent for.

The dai should take under her care all the mothers examined by the midwife during the pre-natal period. If the dai is worried about a mother, she should take the midwife or the doctor to her house. If there is likely to be any trouble, she must remove the mother to a hospital.

The dai must advise the mother on diet and hygiene of pregnancy and ensure that the advice is being followed.

Demonstrate : Actual preparation for delivery in the class-room as well as in a home.

LECTURE V & VI

ANATOMY OF THE REPRODUCTIVE TRACT

The Bony Pelvis

This is the basin through which a baby has to pass to be born. It is situated between the spine and the thighs, and is made up of several bones joined together. The back of the pelvis consists of a large wedge shaped bone which is attached to the spine and is called the sacrum; the front of the pelvis is called the pubis, and the large fan-shaped bone on either side is called the ilium.

The dais must be shown a pelvis, and the main bones must be indicated to them. The pelvis is heart-shaped and it contains the urinary bladder, the rectum, the uterus, the Fallopian Tubes and the ovaries.

The bony pelvis is of course hard, and the bones will not give way by having a baby's soft head pressing on them. If the bones are too small, or if the pelvis is crooked, it may be quite impossible for the baby to be born. Therefore the dai should have some idea of how to tell if a pelvis is normal or not. If a woman is of normal height and if not deformed in any way, she usually has a normal pelvis, but if a woman is having a first baby, and the head of the baby is not down in the pelvis by the 38th week, the dai should suspect that something is wrong, and she should send the woman to a doctor or a hospital for examination. The dai should never undertake to deliver a first baby if the mother is short, or is abnormal in any way with crooked or small pelvis. If a woman has had a difficult delivery or had caesarean operations she should be referred to a good hospital.

The Uterus

It is a hollow, pear-shaped organ, and is capable of stretching much. Before pregnancy, it is only $2\frac{1}{2}''$ long and $1\frac{1}{2}''$ wide, but by the end of pregnancy it has stretched to 4 or 5 times its original size. The opening is called the cervix. In the pregnant uterus the baby grows in the cavity and will be born through the cervix, which will stretch with each pain until it is wide enough to allow the head of the baby.

The Fallopian Tubes

These are on either side and on the top angle of the uterus. They are narrow tubes which end in very fine divided frills, which help to collect the ovum from the ovaries and send it into the tubes, from where it finds its way into the uterus.

The Ovaries

These are just underneath the Fallopian Tubes. One ovum is expelled from the ovaries and is caught by the Fallopian Tubes and passed along the tube. The ovum is fertilised in the Fallopian Tubes and then it passes into the uterus and is embedded.

The dai must know that the bladder is in front of the uterus, and the rectum behind. It is essential to use models or diagrams when teaching elementary anatomy to the dais.

Demonstrate : On actual models :—

Why it is important to know whether a normal baby at birth will be able to enter the passage or not ?

Deformed pelvis, how to recognise it and its significance.

LECTURE VII

PERSONAL HYGIENE AND HAND WASHING

(1) The dais must be taught to keep themselves free from contamination after they have scrubbed up. They must not scrub up too early, but they can have a good preliminary wash while they are waiting for the mother to deliver. They should tuck their saris tidily round their waist, so that the end does not contaminate their freshly scrubbed hands. They must be taught when they should scrub, and they must also be taught why. It can be explained that if dirt is left on their hands, there will be germs there. When they touch the mother, the germs will enter the mother, and she will get fever. Tell them how the mother can get Tetanus this way, and tell them its cause. The hands must be washed even if they do not look dirty; as germs cannot be seen with the naked eye.

(2) The dais should be encouraged to come to the classes in clean saris and with their hair neatly combed. All members of the centre staff must keep their own hands clean and nails trimmed at all times.

(3) The dai should be warned not to conduct cases if she as any septic sores on her hands or any open wound.

(4) *Hand washing.* This is a practical lecture, and must be demonstrated, and each dai must be able to do it correctly at the end of the class. In view of the fact that this class is important it must be frequently repeated. There must also be a cleanliness inspection before every class.

Procedure

Water, soap and coir must be available.

The dai must first remove her bangles and rings, if any, and clean and trim her nails. She must not cut her nails very short exposing the quick nor must she leave jagged edges. Next, she takes the soap and water and washes her hands and arms thoroughly. Do not let the dai rinse the soap off too soon; there is a tendency not to use enough soap and to rinse too soon. After she has washed well she rinses, and then she takes the coir and soaps it well and scrubs her arms, hands and finger nails, for three minutes. After that she rinses and shows her hands for inspection. If her finger nails are still unsatisfactory, she must repeat the procedure. It is found that some dais take 2 or 3 weeks before they can get their hands and nails in a satisfactory condition; so that health visitor will have to pay very special attention to them and she may have to help them to trim their nails.

Demonstrate : Dangers of unhygienic conditions and unclean hans, septic fever, tetanus.

Hand washing, nail cutting, personal hygiene ; wearing of masks, aprons, sterilisation, anti-septics.

LECTURE VIII

USE OF KIT AND ITS CARE

The two bowls are :—

For the baby : The bowl will contain boiled cotton wool swabs and cord ligatures. The dai should wipe the baby's eyes as soon as it is born, using a separate swab for each eye.

For the mother : The bowl should contain boiled cotton wool swabs in detol lotion. The dai will use the swabs to wipe the mother's private parts after the delivery.

The kidney dish can be used to keep the scissors in after they have been boiled; the scissors will be used to cut the baby's cord. The clean muslin pieces can also be kept in the kidney dish, and they should be used to wipe the baby's mouth and nose after birth, so that it can breathe freely and easily. The kidney dish can later be used for the placenta.

The can and tubing is for the use of the dai; she can fill the can with clean water to wash her hands when there is no help. The can with its fittings, if necessary, can be used for giving an enema when the pains first start.

The small tin box should be used to keep cotton wool clean. The tin should be refilled after every delivery.

The plastic sheet is for used at the time of delivery. The dai must wash the sheet carefully after every delivery.

The forceps are only for lifting the bowls and swabs after they are sterilised. The dai must see that they are boiled always with the other things, while doing so the handle should be kept out of the water, so that it can be easily used.

The soap is to wash hands before the delivery.

The kit should only be used for midwifery work. She must clean all the articles used and get the bag ready for the next case.

Demonstration : Give actual demonstration in the use of the bag and its contents.

CARE DURING LABOUR

The dai must visit the mother as soon as she is sent for.

On arrival she should find out whether there is some water on for boiling, and then she should see the mother and ask her:—

When did labour start?

Has she a "show" (slight discharge)?

Have the membranes ruptured?

What are the pains like—strong or weak ?

How often do they come ?

The dai will then examine the mother to see if the baby is coming the right way. If the baby is not coming immediately the dai may give the mother an enema (soap and water).

After the enema, if the pains increase, the bowls, some cotton swabs, receiver and scissors should be put on to boil. The dai will then wash the mother's buttocks and private parts with soap and water, shave the parts, if necessary and put the plastic sheeting under her. Then she will see that the pads are ready and that there is a clean and soft cloth to wrap the baby in. She will keep ready clothes for the mother and some clean sheets for use after the delivery.

She should see that the mother gets hot, sweet drinks at frequent intervals and plenty of cool water in summer.

The dai will then take the boiled things out of the dekchi with the forceps, and will put everything ready on the lid of her kit.

The hands should be washed well. The dai will deliver the baby and after the placenta is delivered, she will tie the cord and separate the baby, and place him in a safe place wrapped in the clean cloth. The mother's uterus should be rubbed gently to expel any clots. The mother should be washed free of blood, clean pads and binder applied and made comfortable. A warm drink should be given to the mother. The dai will then bathe the baby.

The dai must wash all her equipment, boil it again, dry it with her towels and put everything back in the kit, so that it is ready for use for the next case.

Before leaving the house she should leave full instructions with the mother or the attendant. When and how to change the pad; when to put the baby to the breast; how to give drinks of water to the baby.

Demonstration : 1. Demonstrate first stage of labour and its management.

2. Demonstrate actual delivery, second stage and birth of placenta, examination of perineum and placenta after delivery ; care of the mother and care of the new-born.

LECTURES XI & XII

HOW TO AVOID COMPLICATIONS AND WHEN TO SEND FOR MEDICAL AID DURING LABOUR

The dai must make sure that the mother keeps her bowels and bladder empty during labour. She must check that the mother passes urine fairly frequently and the bladder remains empty. An enema may be given at the onset of labour. The reason for this is that a full bladder and rectum interferes with labour, the pains may become weaker, and the delivery may be delayed. The mother must have sufficient fluids and light diet during labour. The dai must try and encourage the mother to take hot, sweet drinks and light nourishment so that her strength is maintained and she is not exhausted. The mother should be encouraged to rest and relax when she has a contraction. The dai must not massage the mother's abdomen or private parts, by doing so the uterus is irritated and contracts tightly and hinders delivery. There is also danger of introducing infection.

The mother must be removed to a hospital if there is :—

1. *Malpresentation.* This means that the baby is not in a normal position. (If it is a breech presentation in a multipara, the dai can deliver the mother. All other malpresentations must be delivered in hospital, *e.g.*, hand, shoulder, brow, etc.).

2. *Obstructed labour.* The baby does not come and something is preventing it, such as a full bladder, loaded rectum, the head being too big, or the mother's bones are too small, some other obstruction in the passage.

3. *Prolonged labour.* When the mother has good pains and yet does not make good progress: If a multipara mother is in labour longer than 24 hours or 48 hours in a primipara, the dai should seek the advice of the midwife of the area, and if necessary, the mother should be moved to a hospital.

4. *Ruptured membranes.* Ruptured membranes for longer than 12 hours without pains: This is important because

if the patient is not delivered fairly quickly, she may become infected. Also, if the membranes rupture early it suggests that the presenting part is not fitting well and there may be malpresentation or disproportion.

Ruptured membranes for longer than two hours with pains: If the patient has strong pains and ruptured membranes with slow advance or no advance she must be sent to hospital within two hours.

5. *Haemorrhage before the birth of the baby.* The bleeding is excessive with clots and occurs with or without pains. The cause of bleeding before delivery is often that the placenta is prematurely detached or is to the lower part of the uterus or at the mouth of uterus in front of the presenting part. The mother must be taken to hospital as early as possible. It is not possible to attend to such cases in the homes and hospital is the best place. A doctor should be sent for as soon as the condition is recognised so that he can safely remove her to the hospital.

6. *Eclamptic fits.* If a woman has eclamptic fits during labour, the dai should send for a doctor. The dai should not disturb the woman. It would not be wise to try and move the mother in a bullock-cart to a hospital as the jolting would excite the fits. The dai should warn the relations of the seriousness of the condition and emphasise the need for immediate medical aid.

7. *General weakness and exhaustion.* If the mother is tired and distressed, the midwife should be sent for and the mother moved to a hospital.

8. *Haemorrhage after the baby is born.* The dai should be taught that if the mother is bleeding and the placenta is still in the uterus, the most important thing to do is to remove the placenta. The dai should rub up a contraction of the uterus and express the placenta and the clots. She should keep her hand on the uterus to feel if the uterus is contracting well. The dai must keep the mother covered up as she may be cold after the blood loss. She must give her a warm drink with a little sugar or gur or glucose. The feet should be raised. If the mother is very ill, the dai could give slowly some saline (one teaspoon of salt in a pint of water) in her rectum in the same way as the enema but very slowly (one pint in 15 to 20 minutes) and she should ask the mother to retain it. The dai can regulate the flow by holding the douche can lower down.

If a mother has had severe haemorrhage she should not be moved for 48 hours. A doctor should be called in to see her. She would also need to be treated for anaemia.

If the mother is near a hospital or doctor medical aid should be obtained immediately.

9. *Lacerations.* A mother may have perineal tear. A small tear will ordinarily heal easily. If the tear is long and reaches the anus or even goes into the anus, it must be repaired by a doctor or in a hospital. The dai should arrange to send the mother to hospital within 12 hours of the delivery in case of a repair.

Demonstration : 1. How to recognise the above conditions—Demonstrate on a dummy emphasising prevention of each.

2. What should be done in each case.

LECTURE XIII

POST-NATAL CARE

The dai must be instructed to give care to the mother twice a day for the first three days and once a day until the tenth day after delivery, or longer, if necessary.

During the visits she should first enquire :—

How the mother feels?

Did she sleep well?

What food and drink has she taken?

Has she passed urine?

Has she had a stool?

What is the discharge like—red, pink?

Does it smell bad?

Are there clots and whether it is too much or scanty?

She should also ask about the baby :

Has the baby been all right ?

Did it take its feeds and how often was it fed?

Has it passed urine and stool?

Is its cord all right?

Has it any other complaint?

After these preliminary enquiries, she will put some water to boil, then give a bedpan to the mother. After washing her hands she will prepare the lotion with boiled water and wash the private parts of the mother and dry her with a clean cloth, and change the pad. The dai must be instructed to wash her hands again and see the breasts whether there is milk and nipples are sore.

The dai should attend to the baby and ask the mother to feet it in her presence, especially if it is the first baby, to make sure that the mother knows the management of breast feeding.

1. *Full breasts.* The dai should be instructed about the care of the breasts. See should find out it the breasts are full or painful and whether the mother has fever as a result of full breasts.

The dai should be told what to do in such cases. The mother may be asked to restrict fluid intake for a day or so.

The baby should be put to breast regularly after relieving them with a hut waters bottle and emptying them a little by expressing a little milk so that the breasts are soft enough for the baby to suck.

LECTURE XIV & XV

WHEN TO SEEK ASSISTANCE

The dai should know when it is necessary for her to inform the midwife of the area and call for immediate medical aid.

In cases of fever :

1. *Breast abscess.* The breast will be flushed and if touched, one may feel it throbbing.

2. *Sepsis of the birth canal.* The mother will have fever and scanty or copious discharge which has a smell and does not look normal. The mother may have some abdominal pain and she may be ill. Sepsis is often due to germs and use of unclean bed, clothes or articles at the time of delivery or afterwards. The dai must be reminded of the importance of washing her hands and using everything perfectly clean for the delivery.

(*Note*: The dai should also be instructed not to attend another case while she is looking after a woman with fever).

3. *Any disease not associated with child birth*

The dai should be told that if a mother's breast and discharge are normal and if she has fever, she must still report and ask for a doctor to see the mother.

In case of Haemorrhage

The mother may suddenly start bleeding 24 hours after the baby is born. Excessive bleeding may be due to a soft uterus which has clots or a piece of membranes or placenta.

The uterus may be rubbed and the clots expressed. If the bleeding continues the midwife should be informed and medical aid asked for.

White Leg

One leg becomes swollen and painful and is cold as compared to the other leg. The mother must be kept in bed and not allowed to move the affected leg. A doctor should be sent for.

Eclamptic Fits

The mother may have fits after the baby is born. She should be attended to as instructed earlier.

Tetanus

The mother will seem quite all right at first, but six to eight days after delivery she starts getting spasms, her teeth clench and she is unable to open her mouth. Such a condition is a result of carelessness and use of unhygienic articles during delivery. The dai should be instructed not to attend to any one else if she had attended on such a case as the infection may affect the other mothers and babies under her care. The midwife and doctor should be informed immediately. The clothes should be sterilised.

Incontinence of Urine

Sometimes, after having had a baby, a woman cannot hold her urine. It may be due to the bladder or the passage having been injured during delivery.

If it continues the condition may be more serious leaving a permanent hole in the bladder. The dai must be instructed to inform the midwife when she recognizes the condition and ask for medical aid. In all such conditions the mother must be asked to drink plenty of fluids.

Incontinence of Stools

This is due to a tear through the perineum to the back passage. The dai should always inform the midwife and arrange for the repair, but if it is an old tear the mother would need to wait until the baby is 2 or 3 weeks old, but a fresh tear should be repaired at once. A neglected tear often gives septic fever.

Demonstrate : How to prevent tears, how to recognize and how they can be repaired.

LECTURE XVI

CARE OF THE NEW-BORN

Reception : The dai must be instructed to have a clean, soft cloth ready to receive the baby.

Eyes : The eyes must be wiped with a piece of clean, soft muslin piece, a separate piece being used for each eye.

Nose and mouth : The dai must be shown how to clear the air passages by wrapping a piece of clean, soft muslin round her little finger to remove the mucous from the throat and nose and by holding the baby with its head down to drain the mucous out.

Cord : The dai should be shown how to ligature the cord and cut it with a pair of scissors. She should be asked to inspect the cord frequently during the next few hours to see that it does not bleed.

The baby when separated can be wrapped up and kept in a safe place with its head on one side so that the mucous does not choke the baby.

The healthy full-term baby should cry as soon as it is born. If it does not cry, the dai may be instructed to carry out :—

Simple Resuscitation

1. Sprinkle cold water on it and give a couple of strokes on its back.
2. If necessary place him alternatively in cold and hot water, finish off with the hot water, and wrap the baby in a blanket.

Demonstrate : Demonstrate care of the baby on dummy foetus.
Use of cord ligatures.
Care of eyes, mouth.
How to know that baby is full-term and healthy.

LECTURE XVII

WHEN TO REFER THE BABY TO A HOSPITAL OR ASK FOR A DOCTOR

The dai should be told that medical aid will be necessary in cases :

1. Baby has an imperforate anus. (Explain what this means and how the dai can find this out).
2. It has a hernia.

3. It has not established normal breathing.

In all these conditions urgent medical aid alone can save the baby.

The dai should be told of other abnormal conditions :

1. Extra fingers and toes.
2. Club foot.
3. Hare lip and cleft palate.
4. Spina Bifida.
5. Prematurity.

The premature baby may do well in the home. The dai should get the health visitor or midwife to advise her how to take care of the premature baby.

Other conditions when medical aid is necessary :

(1) *Cerebral injury* : The baby will be pale. It may have a shrill cry, and it may have twitches.

(2) *Haemorrhage* : From the cord, nose, mouth, vagina, rectum, etc.

(3) *Severe Jaundice* : A little jaundice is common and does not matter, but if the baby becomes deeply jaundiced within a few hours or few days of birth, it will require medical attention.

There are many other conditions when the dai may require to obtain medical aid especially with regards to feeling difficulties, sore eyes, septic cord or any skin or other infections.

LECTURE XVIII

MANAGEMENT OF BREAST FEEDING

Every dai should have instructions on the management of feeding. She should be able to assist the mother in learning the correct way of feeding a baby and should also explain to the relation, the management of feeding.

Instruction on feeding the new-born should consist of :—

(a) Care of nipples during pregnancy.

(b) Importance of wearing clean clothes next to the skin.

(c) Cleaning the breast before each feed.

(d) Importance of good diet and fluids for the mother.

(e) Times of feeding.

The dai should be instructed to ask the mother to put the baby to the breast 6 hours after delivery, if the baby is born at night the first feed may be given in the morning and every three or four hours thereafter from morning until she retires to bed at night (6 A.M. to 10 P.M.) or 5 or 6 feeds in 24 hours.

(f) Length of feeds—7 to 10 minutes on each of the breast.

(g) The method of feeding—The dai should insist that the mother sits up while feeding and keeps everything ready with her unless her condition does not permit. She should hold the baby correctly while feeding so that the nipple fits well in the baby's mouth and the baby sucks at the breast and does not go off to sleep or suck air. After the baby has had feed from one breast he should be held erect by the mother over her shoulder so as to expel air.

(h) After the baby has had his feed he should be put to bed and not rocked in arms.

(i) Plenty of boiled water should be given between the feeds with a spoon and a cup.

Demonstrate : Management of breast feeding. How to give water between feeds.

LECTURE XIX

INFANT FEEDING

The dai should be able to reassure a mother when her baby is healthy that it is getting on well and is able to fulfil his requirements. She should be instructed not to encourage mothers to give cow's or goat's milk. If a child does require additional food the dai should consult the midwife.

A baby who gets sufficient milk from the mother and is properly fed will be satisfied and contented and will sleep well.

The dai and the mother can always satisfy themselves by taking the baby to the nearest centre and having him weighed regularly. He will steadily gain in weight almost a pao each week.

His stools will be normal in colour (yellow, semi-solid

His skin will be fresh and pink and his eyes bright.

He will be active and will take interest in the mother and the surroundings.

The dai should also know that the baby needs regularity in feeding and proper management of feeding. He needs additional foods in the way of fruit juice, vegetable soup and well cooked solids as he grows and these should be given by six months instead of giving additional feeds of cow's milk.

Very often improvement of mother's diets and increasing her fluid intake helps to increase the milk. A nursing mother in addition to diet must have milk, rice or dal, water and soups and some sprouted gram.

Demonstrate : Preparation of fruit juice, vegetable soup, etc. Visit to the main centre to see an infant clinic.

LECTURE XX

IF A BABY DOES NOT DO WELL WHAT ADVICE SHOULD A DAI GIVE

If a baby is under-fed or ill-nourished he will show signs of loss of weight, he will be thin and small. He may be irritable and cry all the time. He may show signs of anaemia, ear discharge, skin condition, diarrhoea, or may have history of frequent colds. He may have swelling of face or feet or defects in the bones. The dai should be instructed to refer all such children to the nearest centre wherever she comes across them.

Weaning

As the baby grows he needs more food. He should therefore be given additional food from the early months so that he has learnt to take sufficient quantity when he actually requires it. The dai's duty is to see that the babies attended by her remain healthy and grow well. She should therefore impress on every mother to have her child under the care of the nearest health centre and avail of the advice.

If a mother is unable to give a sufficient quantity of milk to the baby it is better for her to continue to breast feed the baby unit it is 15 or 18 months old but she should at the same time give additional foods.

At 2 months—Fruit juice, orange, tomato, etc.—4 teaspoons in half a chatank of water.

At 3 months—Vegetable soup—half a chatank once a day.

At 5 months—Well cooked suji—one teaspoonful before a feed.

At 7 months—Well cooked rice, dal and suji.

In weaning it is often convenient to replace the second morning feed with sufficient quantity of food followed by cow's milk 2 : 1.

Similarly the evening feed may be replaced.

The morning and afternoon feeds replaced by cow's milk and lastly the night feed is stopped.

At one year or 18 months the child will have :—

Milk, banana and biscuit	8 oz	7 A.M.
Food, milk or curds	4 oz	11 A.M.
Milk, biscuit and fruit	8 oz	3 P.M.
Food	*	7 P.M.
Milk	4-6 oz	8 P.M.

*The food should consist of ordinary family food but no spices and no mixed foods.

APPENDIX I

Indian Nursing Council

Regulations and Syllabus for the Training of Dais

REGULATIONS FOR THE TRAINING OF DAIS

1. Candidates for the training course for dais should not be less than 20 years of age and in practice for at least three years or have attended to a minimum 50 deliveries.

2. The minimum period of training shall be six months.

3. The pupil shall assist at twenty ante-natal clinics, conduct ante-natal examination of at least 20 pregnant women, pay home visits to ante-natal women under care and, personally conduct not less than 10 deliveries under supervision of a qualified staff. She should conduct 20 deliveries during the period of training.

4. The instructor should be a registered midwife, o health visitor, or medical practitioner.

5. The school for training dais should be established in connection with (a) a women's section attached to a general hospital or maternity home with not less than four maternity beds and having at least 100 confinements per annum; and/or (b) maternity and child welfare centres or primary health centres having well-established ante-natal clinics and domiciliary midwifery services.

If the school is attached to a hospital or maternity home arrangements should exist to provide at least two months training at the nearest welfare centre. Each pupil should be required to make home visits to pregnant women in the area, and, to attend to at least 10 women in the home under the supervision of the health visitor or midwife. As far as may be possible a pupil should have the opportunity to follow the same woman through the ante-natal, natal and post-natal states.

6. The proportion of pupils to teaching staff should not be more than 6 : 1 in the hospital or maternity home or 4 : 1 at welfare centres.

7. The examination shall be oral and practical. Candidates who have fulfilled the conditions enumerated in the preceding paragraphs will be allowed to appear for the examination.

8. Facilities should be provided, when necessary, for a pupil dai to receive sufficient instruction to enable her to express herself clearly in her mother tongue.

SYLLABUS FOR TRAINING COURSE FOR DAIS

Theory	Demonstrations
Anatomy	
Anatomy of pelvis, female generative organs.	Demonstration on dummy and bony pelvis, models of enlarged uterus, placenta, foetus, etc.
Anatomy of uterus, its enlargement during pregnancy; growth of foetus. Placenta, amniotic bag, liquor amnii.	
Asepsis and Anti-septics	
Effect of heat, sun boiling, sterilisation.	Cleanliness of person and hands.
Disinfection of hands, clothes, etc. Personal hygiene and health of the dai.	Method of cleaning, dusting and washing; cleansing of hands and external genitals. Sterilisation of pads, dressings, cord ligatures, instruments, glass ware and other articles. Preparation and keeping of sterile hot and cold water.
	Use of thermometer.
Ante-natal care	
Care of the mother, *e.g.*, hygiene of pregnancy, diet, in-take of water, exercise, clothing. Requirements for health of the mother and the growing foetus.	Home visits. Aims and objects. Method. Advice to the family. Palpation. Recognition of normal health of the mother. Examination of Urine. Demonstration of abnormal conditions.
Examination of the mother ante-natal records and their value. Abnormal conditions during pregnancy, *e.g.*, oedema, disproportion, abnormal position.	
Preparation for confinement	
Preparation in the home and in the hospital.	Making of an occupied bed.
By the mother—clothes for mother and infant, preparation of the room. By the dai—midwifery equipment, preparation of labour room. Purpose of giving an enema.	Preparation of bed for delivery. Preparation of the Dettol lotion. Preparation of dai's bag, its care. Preparation and giving of an enema. Preparation for Vaginal douche and catheterisation.

Theory	Demonstrations
Management of a normal case	
Attendance to calls, examination of mother, recognition of labour pains. Counting of foetal heart and mother's pulse. Abdominal examination to watch progress. Rectal and Vaginal examination. Haemorrhage. Delivery of placenta, prolonged third stage, postportum-haemorrhage.	Demonstration on dummy and pelvis of the process of labour and its management. Care of the perineum. Examination of placenta.
Care of the new-born	
Care of eyes, cord and skin : bath, clothing, etc. Care of premature babies.	Demonstration of care of the new-born.
Delayed labour	
Its recognition	Demonstration on dummy.
Abnormal positions, their recognition and dai's duty in case of breech, occipito posterior, transverse and face presentations.	
Placenta praevia.	
Presentation of the cord.	
Contracted pelvis.	
Management of normal puerperium	
Management of breast feeding. Child's requirements from birth to three months.	Nursing care during lying-in period at home as well as in hospital. Demonstrations during home visits. Care of a baby's bottle.
Puerperal fever	
Its cause, importance of early reporting and early medical aid in case of puerperal fevers.	Precautions in preventing the spread of infection. Disinfection of person and clothing. Disinfection of linen and bag.
Reporting of abnormal conditions (*a*) During pregnancy. (*b*) During labour. (*c*) During puerperium. (*d*) In the child. Dai's duty in the case of abortions.	

Theory	Demonstrations
Registration	
Registration of births and deaths, its importance.	
Dai's duty in reporting births, still births, etc.	
Meternal deaths.	
Record Writing	
Ante-natal records. Midwifery records.	Maintaining records of cases under care and cases personally conducted by the pupil both in hospital as well as home.

APPENDIX II

Headings for Dai's Registers

I. Register to be maintained in the Directorate of Health Services (Maternity and Child Welfare Section).

Serial No.	Name of Dai	Age	Husband or Father's name	Address	District	No. of Certificate	Date & year of issue	Remarks
1	2	3	4	5	6	7	8	9

II. Local Register to be maintained by the supervising midwife or at the State Dispensary.

Year : *District :* *Thana or Tehsil :*

Serial No.	Name of Dai	Age	Address	Village of practice	No. of certificate	Date of issue	Year of student's practice in the locality	Remarks

Issued by

CENTRAL HEALTH EDUCATION BUREAU,
KOTLA ROAD, NEW DELHI

PRINTED IN INDIA BY THE MANAGER GOVERNMENT OF INDIA PRESS
NEW DELHI